

# Grafic CTS 3

## APPLICATIONS

Designed for use with CST DLP™ DfS computer-to-screen equipment

## GENERAL CHARACTERISTICS

- Extremely high resolution pure photopolymer emulsion
- Resistant to UV-cured, water-based UV-cured and solvent-based ink
- Exposes 15 times faster than diazo or dual-cure emulsions
- Easy to reclaim

## DIRECTIONS FOR USE

Handle under yellow safelight or low wattage tungsten lights. Avoid exposure to daylight, quartz/halogen lamps, cool white fluorescent lamps, or discharge lamps.

## Sensitizing & Mixing

Emulsion is presensitized during manufacture and does not require mixing.

## Mesh Preparation & Degreasing

Thoroughly degrease mesh prior to use with Direct Prep 2 or Direct Prep 3. Dry screen and store in a dust free, dry environment prior to coating.

## Coating

Grafic CTS 3 can be coated by hand or with the use of an automatic coating machine. Apply one or two coats to the substrate side of the screen, along with one or two coats to the squeegee side. For a thicker stencil, apply additional coats to the squeegee side prior to drying. For a thin and higher quality stencil, apply one or two additional coats to the substrate side of the screen after the initial coats have dried.

## Drying & Storage

Thoroughly dry the coated screen at a maximum temperature of 40°C or 105°F in a dust free, dark or yellow light area, with the substrate side facing down to optimize stencil quality. Coated screens should be stored in a dust free, dry, safelight environment and used within one month for best results.

## Exposing

Grafic CTS 3 has high sensitivity to UV light and enables high speed imaging with CST DfS computer to screen technology. Ensure that the emulsion surface is free of dust to minimize pinholes. Exposure speed depends on mesh count and color and the number of coats of emulsion. Typical running speeds for 150 cm – 180 cm (380 in – 460 in) mesh are 25cm/sec for dyed mesh and 30cm/sec for white. Perform an exposure test with a 21-step Sensitivity Guide to determine correct exposure speed. Grafic CTS 3 stencils should hold a solid step 5 after thorough developing. The 21-step Sensitivity Guide should be taped directly to the surface of the emulsion in an area that will be fully exposed.

## Developing

Wet both sides of screen with a strong, finely divided spray of water and continue washing out until all image areas are fully open. Rinse both sides of screen and dry thoroughly before use. A properly exposed and developed screen will not leave excessive residue on the squeegee side.

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## Post Exposing

Post expose with daylight or exposure lamp to produce a more water-resistant stencil.

## Reclaiming

Remove all ink residues immediately after printing with Remove IR1 or IR2 or another appropriate solvent. Remove stencil with SaatiChem Remove ER1, ER2, ER4, ER5, or ER10 and a pressure washer. For stains and ghost images, use SaatiChem Remove HR1, HR2 or HR3 followed by a pressure washer. For full details about reclaiming products refer to the Saatichem product brochure or individual product Technical Data Sheets.

## Health & Safety

Before using, refer to appropriate material safety data sheets.

## PROBLEM SOLVING

### Poor Coating Quality

- Properly clean, degrease, and rinse screen fabric to remove all residues and trace of chemicals
- Properly and evenly tension fabric
- Clean and ensure defect free edge on scoop coater

### Poor Detail or Difficulty Washing Out Image

- Ensure emulsion and coated screens are handled in safelight conditions only

- Optimize exposure time
- Do not store sensitized emulsion or coated screens at high temperatures

### Emulsion Falls Off, Extreme Pinholes or Severe Stencil Breakdown During Printing

- Ensure that damp screens are not being exposed
- Only expose screens with an even and consistent coating thickness
- Ensure that stencil has not been severely underexposed
- Ensure emulsion is not too old and has not been stored at high temperature

### Difficulty Reclaiming Screens

- Optimize exposure speed and properly rinse squeegee side of screen during developing to remove all trace of residue, especially when using dyed fabric

## STORAGE

When sealed in the original container and stored in cool conditions, SaatiChem products will maintain their original properties for one year from the date of manufacture.

## PACKAGING

Available in one, five and 200 kilogram containers. In North America available in one, five, and fifty US gallon containers.

### WARRANTY & LIMITED REMEDY

The directions, recommendations, and specifications contained in this Technical Data Sheet are meant as a guide to the use of the product and shall not bind the company. Product specifications are subject to change without notice.

The following is made in lieu of all other expressed or implied warranties, including any implied warranty of merchantability or fitness for a particular purpose:

All SaatiChem manufactured liquid products are warranted to be free of defects in materials and manufacture and to meet the specifications stated in SaatiChem's applicable Product Bulletin. SaatiChem will replace or refund the price of any SaatiChem manufactured liquid product that does not meet this warranty within the applicable warranty period.

The remedies are exclusive. In no case shall SaatiChem be liable for any other direct or indirect damage or loss, including without limitation any incidental, special, or consequential damages, or any material costs or labor charges incident to the removal or replacement of any mesh, screen, ink, substrate, finished graphic or any other item.

To receive the Material Safety Data Sheet (MSDS), send an e-mail to: [MSDS@saatichem.com](mailto:MSDS@saatichem.com)

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#### For More Information

about SaatiChem  
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